



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/621,691	07/21/2000	Tsuneyuki Kikuchi	Q060237	4867

7590

08/05/2004

Sughrue Mion Zinn Macpeak & Seas
2100 Pennsylvania Avenue NW
Washington, DC 20037-3202

EXAMINER

RAMPURIA, SHARAD K

ART UNIT	PAPER NUMBER
----------	--------------

2683

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/621,691

Applicant(s)

KIKUCHI, TSUNEYUKI

Examiner

Sharad Rampuria

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Response to Amendment

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahara et al. in view of Sevcik et al.

1. Regarding claim 1, Takahara disclosed A radio data communication apparatus, comprising:
a radio portable terminal (Fig.1) including a portable terminal section for deciding a notification condition (21; Fig.1) of a circuit state (2; Fig.1) and issuing a notification of the notification condition, and a portable radio section for receiving the notification of the notification condition and notifying said portable terminal section of the circuit state when the circuit state satisfies the notification condition received from said portable terminal section; (Col.4; 21-33)

a notification condition of a circuit state between the radio portable terminal and a base station (col.12; 1-5) a radio portable terminal being operable to connect a radio circuit based on the circuit state of the notification received from said portable radio section to transmit and receive data to and from a server over a radio communication network, a public network and a wire communication network. (col.12; 1-8)

Takahara fails to disclose based on information of power supplied to portable terminal section. However, Sevcik teaches in an analogous art, that based on information of power supply supplied to said radio portable terminal and issuing a notification of the notification condition (col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include based on information of power supplied to portable terminal section in order to provide a method for conserving battery power in mobile communication device.

2. Regarding claim 2, Takahara disclosed all the particulars of the claim except based on information of power supplied to portable terminal section. However, Sevcik teaches in an analogous art, that A radio data communication apparatus as claimed in claim 1, wherein said portable terminal section includes means for notifying said portable radio section of the power supply information supplied to said portable terminal section, and said portable radio section includes means for deciding a notification condition of the circuit state based on the power supply

information of the notification received and notifying said portable terminal section of the circuit state when the circuit state satisfies the notification condition. (col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include based on information of power supplied to portable terminal section in order to provide a method for conserving battery power in mobile communication device.

3. Regarding claim 3, Takahara disclosed all the particulars of the claim except based on information of power supplied to portable terminal section. However, Sevcik teaches in an analogous art, that A radio data communication apparatus as claimed in claim 1, wherein said portable terminal section includes means for notifying said portable radio section of the information of the power supply supplied to said portable terminal section, and said portable radio section includes means for determining a notification condition of the circuit state based on the power supply information of the notification received and connecting a circuit when the circuit state satisfies the notification condition. (col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include based on information of power supplied to portable terminal section in order to provide a method for conserving battery power in mobile communication device.

4. Regarding claim 4, Takahara disclosed all the particulars of the claim except information indicative of a battery remaining amount where the power supply is a battery. However, Sevcik teaches in an analogous art, that A radio data communication apparatus as claimed in claim 1, wherein the power supply information includes power supply type information which is information indicative of whether the power supply being supplied is an ac power supply or a battery, and information indicative of a battery remaining amount where the power supply is a battery. (response... power remaining; col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include information indicative of a battery remaining amount where the power supply is a battery in order to provide a method for conserving battery power in mobile communication device.

5. Regarding Claim 5, Takahara disclosed A radio data communication apparatus as claimed in claim 1, wherein the circuit state includes at least one of a reception electric field strength which is a strength of radio waves received from a radio base station by said portable radio section, and a state of a circuit indicated by an error rate of control data received from the radio base station by said portable radio section. (Col.16; 48-col.17; 17).

10. Regarding claim 10, Takahara disclosed A radio data communication method, comprising:

a portable radio step performed by said radio portable terminal for receiving the notification of the notification condition and notifying the portable terminal step of the circuit state when the circuit state satisfies the condition received from the portable terminal step (col.12; 1-5); and

a radio portable terminal being operable to connect a radio circuit based on the circuit state of the notification received from said portable radio section to transmit and receive data to and from a server over a radio communication network, a public network and a wire communication network. (col.12; 1-8)

Takahara fails to disclose based on information of power supplied to portable terminal section. However, Sevcik teaches in an analogous art, that a portable terminal step performed by a radio portable terminal for deciding a notification condition of a circuit state based on information of power supply supplied to said radio portable terminal and issuing a notification of the notification condition (col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include based on information of power supplied to portable terminal section in order to provide a method for conserving battery power in mobile communication device.

11. Regarding claim 11, Takahara disclosed all the particulars of the claim except based on information of power supplied to portable terminal section. However, Sevcik teaches in an analogous art, that A radio data communication apparatus as claimed in claim 10, wherein said portable terminal section includes means for

notifying said portable radio section of the power supply information supplied to said portable terminal section, and said portable radio section includes means for deciding a notification condition of the circuit state based on the power supply information of the notification received and notifying said portable terminal section of the circuit state when the circuit state satisfies the notification condition. (col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include based on information of power supplied to portable terminal section in order to provide a method for conserving battery power in mobile communication device.

12. Regarding claim 12, Takahara disclosed all the particulars of the claim except based on information of power supplied to portable terminal section. However, Sevcik teaches in an analogous art, that A radio data communication apparatus as claimed in claim 10, wherein said portable terminal section includes means for notifying said portable radio section of the information of the power supply supplied to said portable terminal section, and said portable radio section includes means for determining a notification condition of the circuit state based on the power supply information of the notification received and connecting a circuit when the circuit state satisfies the notification condition. (col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include based on information of power supplied to portable

terminal section in order to provide a method for conserving battery power in mobile communication device.

13. Regarding claim 13, Takahara disclosed all the particulars of the claim except information indicative of a battery remaining amount where the power supply is a battery. However, Sevcik teaches in an analogous art, that A radio data communication apparatus as claimed in claim 10, wherein the power supply information includes power supply type information which is information indicative of whether the power supply being supplied is an ac power supply or a battery, and information indicative of a battery remaining amount where the power supply is a battery. (response...power remaining; col.7; 47-col.8; 12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include information indicative of a battery remaining amount where the power supply is a battery in order to provide a method for conserving battery power in mobile communication device.

14. Regarding Claim 14, Takahara disclosed A radio data communication method as claimed in claim 10, wherein the circuit state includes at least one of a reception electric field strength which is a strength of radio waves received from a radio base station by the portable radio step, and a state of a circuit indicated by an error rate of control data received from the radio base station by the portable radio step. (Col.16; 48-col.17; 17)

Claims 6-8 & 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahara et al., & Sevcik further in view of Guerlin et al.

6. Regarding Claim 6, The above combination disclosed all the particulars of the claim except the circuit state based on an operation state of a CPU. However, Guerlin teaches in an analogous art, that A radio data communication apparatus as claimed in claim 1, wherein said portable terminal section includes means for determining a notification condition of the circuit state based on an operation state of a CPU of said portable terminal section and notifying said portable radio section of the notification condition, and said portable radio section includes means for notifying said portable terminal section of the circuit state when the circuit state satisfies the condition received from said portable terminal section. (Col.7; 21-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the circuit state based on an operation state of a CPU in order to determine if the cpu is available for communication.

7. Regarding Claim 7, The above combination disclosed all the particulars of the claim except the circuit state based on an operation state of a CPU. However, Guerlin teaches in an analogous art, that A radio data communication apparatus as claimed in claim 1, wherein said portable terminal section includes means for

notifying said portable radio section of an operation state of a CPU of said portable terminal section, and said portable radio section includes means for deciding a notification condition of the circuit state based on the operation state of said CPU of the notification received and notifying said portable terminal section of the circuit state when the circuit state satisfies the notification condition.

(Col.7; 26-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the circuit state based on an operation state of a CPU in order to determine if the cpu is available for communication.

8. Regarding Claim 8, The above combination disclosed all the particulars of the claim except the circuit state based on an operation state of a CPU. However, Guerlin teaches in an analogous art, that A radio data communication apparatus as claimed in claim 1, wherein said portable terminal section includes means for notifying said portable radio section of an operation state of a CPU of said portable terminal section, and said portable radio section includes means for deciding a notification condition of the circuit state based on the operation state of said CPU of the notification received and connecting a circuit when the circuit state satisfies the notification condition. (Col.6; 29-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the circuit state based on an operation state of a CPU in order to enable communication with cpu.

15. Regarding Claim 15, The above combination disclosed all the particulars of the claim except the circuit state based on an operation state of a CPU. However, Guerlin teaches in an analogous art, that A radio data communication method as claimed in claim 10, wherein the portable terminal step includes a step of determining a notification condition of the circuit state based on an operation state of a CPU of the portable terminal step and notifying the portable radio step of the notification condition, and the portable radio step includes a step of notifying the portable terminal step of the circuit state when the circuit state satisfies the condition received from the portable terminal step. (Col.7; 21-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the circuit state based on an operation state of a CPU in order to enable communication with cpu.

16. Regarding Claim 16, The above combination disclosed all the particulars of the claim except the circuit state based on an operation state of a CPU. However, Guerlin teaches in an analogous art, that A radio data communication method as claimed in claim10, wherein the portable terminal step includes a step of notifying the portable radio step of an operation state of a CPU of the portable terminal step, and the portable radio step includes a step of deciding a notification condition of the circuit state based on the operation state of said CPU of the notification received and notifying the portable terminal step of the circuit state when the circuit state satisfies the condition. (Col.7; 26-43). Therefore, it would

have been obvious to one of ordinary skill in the art at the time of invention to include the circuit state based on an operation state of a CPU in order to enable communication with cpu.

17. Regarding Claim 17, The above combination disclosed all the particulars of the claim except the circuit state based on an operation state of a CPU. However, Guerlin teaches in an analogous art, that A radio data communication method as claimed in claim 10, wherein the portable terminal step includes a step of notifying the portable radio step of an operation state of a CPU of the portable terminal step, and the portable radio step includes a step of deciding a notification condition of the circuit state based on the operation state of said CPU of the notification received and connecting a circuit when the circuit state satisfies the condition. (Col.6; 29-41) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the circuit state based on an operation state of a CPU in order to enable communication with cpu.

Claims 9 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahara et al., & Sevcik et al. further in view of Nounin et al.

9. Regarding Claim 9, The above combination disclosed all the particulars of the claim except a processing speed of said CPU and/or an amount of power consumption of the power supply are different. However, Nounin teaches in an analogous art, that A radio data communication apparatus as claimed in claim 6,

wherein the operation state of said CPU includes information representative of operation states wherein a processing speed of said CPU and/or an amount of power consumption of the power supply are different. (Col.32; 45-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a processing speed of said CPU and/or an amount of power consumption of the power supply are different in order to determine power consumption method properly.

18. Regarding Claim 18, The above combination disclosed all the particulars of the claim except a processing speed of said CPU and/or an amount of power consumption of the power supply are different. However, Nounin teaches in an analogous art, that A radio data communication method as claimed in claim 15, wherein the operation state of said CPU includes information representative of operation states wherein a processing speed of said CPU and/or an amount of power consumption of the power. (Col.32; 45-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a processing speed of said CPU and/or an amount of power consumption of the power supply are different in order to maintain separately.

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahara et al., & Sevcik et al. further in view of Hee-Won Seo (GB-2328588-A).

Art Unit: 2683

19. Regarding claim 19, The above combination disclosed all the particulars of the claim except the portable radio terminal device the notification condition by selecting a third notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a second predetermined range. However, Hee-Won Seo teaches in an analogous art, that A radio data communication apparatus as claimed in claim 4, comprising:

wherein the portable radio terminal device the notification condition by selecting a first notification condition from a plurality of predetermined notification conditions when the power supply type information indicates the ac power supply, (pg.4; 16-37)

wherein the portable radio terminal device the notification condition by selecting a second notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a first predetermined range, (pg.4; 16-37) and

wherein the portable radio terminal device the notification condition by selecting a third notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a second predetermined range. (pg.4; 16-37) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the portable radio terminal device the notification condition by selecting a third notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the

Art Unit: 2683

battery remaining amount is within a second predetermined range in order to provide adjusting activity intervals according to remaining battery capacity in a mobile communication terminal.

20. Regarding claim 20, The above combination disclosed all the particulars of the claim except the portable radio terminal device the notification condition by selecting a third notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a second predetermined range. However, Hee-Won Seo teaches in an analogous art, that A radio data communication apparatus as claimed in claim 13, comprising:

deciding the portable radio terminal device the notification condition by selecting a first notification condition from a plurality of predetermined notification conditions when the power supply type information indicates the ac power supply, (pg.4; 16-37)

deciding the portable radio terminal device the notification condition by selecting a second notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a first predetermined range, (pg.4; 16-37) and

deciding the portable radio terminal device the notification condition by selecting a third notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a second predetermined range. (pg.4; 16-37) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the portable radio terminal device the

Art Unit: 2683


notification condition by selecting a third notification condition from the predetermined notification conditions when the power supply type information indicates the battery and the battery remaining amount is within a second predetermined range in order to provide adjusting activity intervals according to remaining battery capacity in a mobile communication terminal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is 703-308-4736. The examiner can normally be reached on Mon-Fri. (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Sharad Rampuria
July 29, 2004


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600